

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF CLAIMS:**

Please cancel claims 1-10; and add new claims 11-12 as follows.

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (new) A cartridge comprising:
  - a) a body defining:
    - i) at least first and second channels; and
    - ii) a cavity separating the channels, wherein an end of the first channel is positioned on a first side of the cavity, an end of the second channel is positioned on a second side of the cavity, and the cavity is defined by:
      - a first spherical surface positioned adjacent the end of the first channel;
      - a second spherical surface positioned adjacent the end of the second channel, wherein the first and second surfaces are concentric spherical surfaces; and

a recessed surface between the first and second spherical surfaces;

b) an elastic membrane for establishing a seal with the first and second spherical surfaces to prevent the flow of fluid between the channels, wherein the recessed surface is recessed from the first and second spherical surfaces to provide a gap between the membrane and the recessed surface when the membrane is pressed against the first and second spherical surfaces; and

c) a valve actuator having a third spherical surface for pressing the membrane against the first and second spherical surfaces, wherein each of the first and second spherical surfaces has a radius of curvature substantially equal to the sum of the radius of curvature of the third spherical surface plus the thickness of the membrane.

12. (new) The cartridge of claim 11, further comprising an elastic body for forcing the valve actuator to press the membrane against the first and second spherical surfaces.